

ABSTRACT

A magnetoresistive read/write head includes an integral top and side shields deposited
5 on top of and substantially surrounding the multiple layers of the MR sensor stack. Such a
design is particularly advantageous in CPP designs in which the only spacing necessary
between the side shields and the bottom shield is due to a gap layer. The integral top and side
shields design works both with CPP heads having pile bias stabilization as well as those
having permanent magnet abutted junctions or patterned exchange bias stabilization. In
10 addition, the design is also advantageous in CIP heads having permanent magnet abutted
junctions or patterned exchange bias stabilization. In this latter embodiment, it may be
possible to reduce the profile of the permanent magnet and any conductors to increase the
efficacy of the side shields.